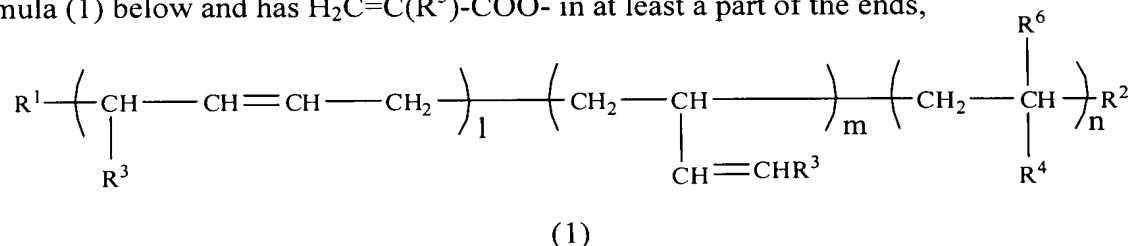


# IN THE CLAIMS

Please amend the claims as follows:

1. (original) A modified diene- $\alpha$ -olefin copolymer which is represented by the formula (1) below and has  $\text{H}_2\text{C}=\text{C}(\text{R}^5)\text{-COO-}$  in at least a part of the ends,



wherein  $\text{R}^1$  and  $\text{R}^2$  independently represent a hydroxyl group or  $\text{H}_2\text{C}=\text{C}(\text{R}^5)\text{-COO-}$ ,  $\text{R}^3$ 's,  $\text{R}^5$ 's, and  $\text{R}^6$ 's independently represent a hydrogen atom or an alkyl group having 1 to 10 carbon atoms,  $\text{R}^4$ 's independently represent a phenyl group, a pyridyl group, a chlorine atom, a cyclohexyl group, or a carbonyloxyalkyl group, and l, m, and n represent the number of repetition.

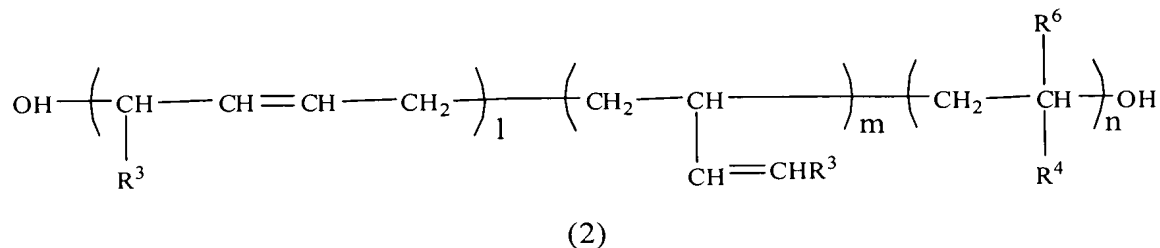
2. (original) The modified diene- $\alpha$ -olefin copolymer according to claim 1, having a number average molecular weight of 300 to 10,000.

3. (original) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein the amount of  $\alpha$ -olefin compounds is 1 to 90 mol % in the total amount of the copolymer.

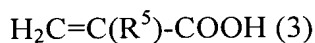
4. (original) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein the proportion of the end with a structure of  $\text{H}_2\text{C}=\text{C}(\text{R}^5)\text{-COO-}$  is 20 to 100 mol % of the total end groups.

5. (original) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein the  $\text{R}^4$  is a phenyl group.

6. (original) A method for producing the modified diene- $\alpha$ -olefin copolymer according to claim 1, comprising reacting a diene- $\alpha$ -olefin copolymer shown by the following formula (2) with an unsaturated carboxylic acid shown by the following formula (3) or a derivative thereof, adding 1 mg to 1 g of a radical scavenger per 100 g of the copolymer,



wherein  $\text{R}^3$ 's and  $\text{R}^6$ 's independently represent a hydrogen atom or an alkyl group having 1 to 10 carbon atoms,  $\text{R}^4$ 's independently represent a phenyl group, a pyridyl group, a chlorine atom, a cyclohexyl group, or a carbonyloxyalkyl group, and l, m, and n represent the number of repetition,



wherein  $\text{R}^5$  is a hydrogen atom or an alkyl group with 1 to 10 carbon atoms.

7. (original) The method for producing the modified diene- $\alpha$ -olefin copolymer according to claim 6, wherein the diene- $\alpha$ -olefin copolymer is reacted with the unsaturated carboxylic acid or a derivative thereof in a solvent, the concentration of the copolymer in the solvent being 50 wt % or less.

8. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein  $\text{R}^3$ ,  $\text{R}^5$  and  $\text{R}^6$  are each independently a hydrogen atom or a methyl group.

9. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein a molar ratio of structural unit originating from conjugated diene compounds to structural unit originating from  $\alpha$ -olefin compounds is 10:90 to 99:1.

10. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein a molar ratio of structural unit originating from conjugated diene compounds to structural unit originating from  $\alpha$ -olefin compounds is 20:80 to 98:2.

11. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein a molar ratio of structural unit originating from conjugated diene compounds to structural unit originating from  $\alpha$ -olefin compounds is 30:70 to 97:3.

12. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, wherein  $R^4$  is a carbonyloxyalkyl group selected from the group consisting of carbonyloxymethyl and carbonyloxyethyl.

13. (new) The modified diene- $\alpha$ -olefin copolymer according to claim 1, having a number average molecular weight of 500 to 5,000.